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**RE: Applicant: Hassan. A et al.**  
**Serial No: 10/669,357, filed 25 Sept. 2003**  
**Repulable Wax**

**Reply Brief**

Attached please find the following papers for filing:  
-Transmittal Form (1 page), including  
Certificate of Facsimile Transmission/Mailing; and.  
-Applicants' Reply Brief (11 pages).

Benjamin Appelbaum  
Reg. No. 38,068

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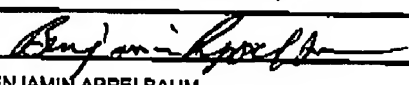
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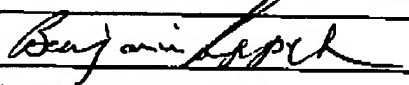
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<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	Application Number	10/669,357
	Filing Date	25 Sept. 2003
	First Named Inventor	Aziz Hassan
	Art Unit	1782
	Examiner Name	Era C. Cameron
	Attorney Docket Number	BSN6DIV
Total Number of Pages in This Submission		13

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**IDENTIFICATION PAGE**

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Applicant: HASSAN, AZIZ et al.

Serial No: 10/669,357

Filed: 25 Sept. 2003

Atty. Docket No: BSN5DIV

Examiner: ERMA C. CAMERON

Group Art Unit: 1762

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For: REPULPABLE WAX

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**REPLY BRIEF**

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This Reply Brief is in response to the Examiner's Answer mailed September 19, 2007, and is being filed in accordance with 37 C.F.R. §41.41.

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**1. STATUS OF CLAIMS**

There are forty-seven (47) Claims in the application.

Claims 30 and 45 are the independent Claims.

The status of the Claims as set out in Office Paper No. 20060801 (Office Action mailed 3 August 2006) is as follows:

Claims allowed: None.

Claims objected to: None.

Claims rejected: Claims 30-39, 41-42, 45 and 47.

Claims cancelled: Claims 1-29, inclusive; 40, 43, 44, and 46.

The Claims on Appeal are: Claims 30-39, 41-42, 45 and 47.

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**2. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Claims 30-39, 41-42, 45 and 47 stand rejected under 35 U.S.C. 103(a) as being unpatentable.

The rejections of these Claims could be grouped as follows:

Whether Claims 30-39, 41-42, 45 and 47 are unpatentable under 35 U.S.C. §103(a), as being obvious based on Sleeter (U.S. Pat. No. 6,011,286).

Whether Claims 30-38, 41-42, 45 and 47 are unpatentable under 35 U.S.C. §103(a), as being obvious based on WO96/00815.

Whether Claims 30-33, 41 and 47 are unpatentable under 35 U.S.C. §103(a), as being obvious based on RD 392017.

In the Argument section, the references will be referred to as follows:

- the Sleeter patent (U.S. Pat. No. 6,001,286, "the '286 reference"),
- WO96/00815 ("the '815 reference"), and
- an Abstract obtained through Derwent, RD 392017 ("the '017 reference").

In Applicants' May 2006 reply to an Office Action, a copy of the entire '017 reference was obtained and made part of the record in an Information Disclosure Statement; a copy of the '017 reference was included in the Evidence Appendix of the Appeal Brief.

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### 3. ARGUMENT

#### A. Introductory Comments

Applicant's Appeal Brief contained separate sub-arguments for the patentability of independent Claim 30 and independent Claim 45. This Reply Brief will only address specific points raised in the Examiner's Answer.

#### B. Issues Concerning Summary of Claimed Subject Matter

One of the purposes of this section is to summarize the claimed subject matter. The purpose of providing Table A in the Summary of Claimed Subject Matter was to do just that, and provide the Board with a summary of the fatty acid contents of the inventive waxes, rather than having to refer back to tables contained in the specification. The stearic acid content ( $C_{18:0}$  content) of these waxes is the subject of appealed Claims 36, 37, 38 and 45.

The point of the statement about "the triglyceride does not contain 100% by weight of any one particular fatty acid" (Appeal Brief, p. 8 lines 6) was also intended as a summary statement, and the fatty acid content of the triglyceride is a subject of the appealed claims, as described in the preceding paragraph.

The statements about the melting points of the palm and soybean triglycerides on p. 9, lines 6-9 of the Appeal Brief as being erroneous are similarly incorrect. The melting points are claimed subject matter; Claim 30 refers to a melting point greater than 120 degrees F, Claims 31-32 claim specific melting point ranges, and Claim 45 also claims a specific melting point range.

#### C. Reply to Response to Arguments

##### 1) Claim Interpretation and Limitations

MPEP §2111 states the pending claims must be given their broadest interpretation consistent with the specification, during the prosecution of an application. In re Hyatt, 54 USPQ2d 1664, 1667 (F. Cir. 2000). The broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. In re Cortright, 49 USPQ2d 1464, 1468 (F. Cir. 1999). The focus of MPEP §2111 is how the claims of an application are to be interpreted in the context of an applicant's specification. However, it seems logical that when presented with evidence from a particular patent applicant that they are in fact limiting the scope of their invention to a particular subject matter, the Examiner would indeed accept such evidence and narrow the interpretation of the reference to suit the scope of the reference, as defined by that particular applicant.

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Specifically, in the Response to Office Action, filed on 18 May 2006 (in response to Office Paper/Mail Date: 111405) Applicant submitted documents obtained from the file wrapper of the Sleeter patent in question (U.S. Pat. No. 6,011,286). This evidence was that applicant's reply to a restriction requirement by the Office, where that applicant states how the specification of that application is to be particularly limited. As this Applicant has stated in the Response of 18 May 2006, and in the Appeal Brief (page 14, line 11-p. 15, line 16), and reproduced below, Sleeter intended his application, and by implication the resulting patent, to be limited to compositions such as oriented strand board, rather than paper and paperboard products.

The title of the '286 reference refers to "composite boards". The specification focuses on using the material for composites such as "particle board, plywood, oriented strand board ("OSB"), medium density fiberboard, hardboard, formed molded shapes, etc.. Adhesives and laminants alone or synergistically blended together are used to bond these materials into desired forms such as panels, structural shapes, etc." (col. 1, lines 56-61).

The examples utilize oriented strand board. The overall focus of the specification and examples is on structural products, oriented strand board in particular; there are broad references within the specification referring to the material's use on "composite materials which generally include wood, fibers and other agricultural materials" (col. 1, lines 53-55), or wood fibers (col. 3, lines 8-10).

The file history of the '286 patent includes statements from the patentee's attorney that the scope of the '286 patent was intended to be limited to structural products. In an "Election and Traverse of Restriction Requirements" filed 13 October 1988, the patentee's attorney states, at two locations within the document, that "The invention relates to waterproofing a composite board or panel" (p. 2, second to last paragraph, first line), and "Here, the invention is a process for making a new and novel composite panel which, in turn, has superior characteristics." (p. 3, paragraph under the heading of "Necessity Test", second and third lines). A copy of the "Election and Traverse of Restriction Requirements" filed 13 October 1988, was filed as Exhibit A in the Response filed 18 May 2006, and cited in the Appeal Brief at p. 14, line 11 - p. 15, line 16, and Exhibit C of Appeal Brief Evidence Appendix

In view of this admission of how the inventor viewed the scope of the patent, as stated by the patentee's attorney during the prosecution of the '286 patent, it is apparent that the '286 reference does not intend to cover the fibrous cellulosic articles claimed by the Applicants in

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the present application.

5 The Federal Circuit has repeatedly stated that the prosecution history of a patent is to be included when interpreting the claims. (See, for example, Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 83 USPQ2d 1385 (F. Cir. 2007)). In Standard Oil Co. v. American Cyanamid Co., 227 USPQ 283, 286 (F. Cir. 1985), the court stated "[T]he prosecution history (or file wrapper) limits the interpretation of claims so as to exclude any interpretation that may have been disclaimed or disavowed during prosecution in order to obtain claim allowance", and for prosecution disclaimer to arise, "the alleged disavowing actions or statements made during prosecution be both clear and unmistakable." Omega Engineering Inc., v. Raytek Corp., 67  
10 USPQ2d 1321,1329 (F. Cir. 2003).

15 Thus, when applying these principles to the prosecution history of the reference, it is clear that the reference's inventor intended the application to be limited to oriented strand board and related products, rather than fibrous cellulosic products as claimed by Applicants. As so interpreted, the '286 reference should thus not be applicable, and the Board is respectfully requested to reverse the rejection of the appealed claims.

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## 2) Repulping/Recycling and Dispersion

At issue is whether the independent claims require recycling; the examiner alleges the claim only requires that the composition applied be dispersible in warm alkaline aqueous solution. Applicant submits that one skilled in the art would realize, from reading both the claims and the specification, that a coating being dispersible is a warm alkaline aqueous solution is recycling.

As explained in the Specification, one aspect of Applicants' invention is that of being able to remove coatings from packaging boxes, which otherwise would be disposed of in landfills (specification at p. 2, line 22-p. 3, line 11; see also p. 4, lines 18-25). One technique is called floatation (p. 4, lines 18-25, )wherein the nonpaper components of the material being recycled are separated by density, and surfactants are used to foam and float these unwanted components away from the paper fiber that is being recycled.

The terms recycling, repulping and dispersion have been described as being interchangeable terms at several points in the specification and the Appeal Brief.

Applicants discussed how the terms "repulping", "recycling", "repulpability" and "recyclability" were being used throughout the specification and claims (Appeal Brief at p. 6, lines 6-24, and particularly lines 6-12). This explanation was also provided in response to Office Actions during the prosecution of this application (see Response to Office Action, filed on 2 Sept 2005).

Specifically, the specification stated that the terms "repulping" and "recycling", or "repulpability" and "recyclability"; will be used interchangeably, referring to the process of recycling fibrous materials, and the ability of these materials to be recycled, respectively (p. 8, lines 26-28).

Recycling paper involves mixing the paper to be recycled with warm water, usually with a pH in the alkaline range ( $> \text{pH}7$ ) (specification at p. 3, lines 3-4). The general conditions used for repulping (recycling) of cellulosic products, such as paper, corrugated box board, linerboard, corrugated paper and related products, employ immersion of the products in warm, alkaline water ( $\text{pH} > 7$ ) (specification at p. 16, lines 15-23).

At several points in the specification, Applicant stated that the present invention relates to a coating composition of a highly hydrogenated vegetable oil (palm, soybean, corn) that has wax-like properties and can be coated on cellulosic materials such as paper and paperboard

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through conventional means and subsequently removed through commercially practiced recycling techniques, (specification at p. 7, lines 14-17) or which composition can be removed from the treated material by dispersion in warm alkaline water, enabling the recycling of the treated material using conventional methods of paper recycling. (specification at p. 8, lines 11-16).

5 In the specification (p. 8, lines 11-16) Applicant indicates that the applied composition can be removed from the treated material by dispersion in warm alkaline water, enabling the recycling of the treated material using conventional methods of paper recycling. On  
10 p. 12, lines 26-30, Applicants define what a dispersant is: a chemical which may, by itself, cause the composition to be dispersed from the surface to which it has been applied. See also the data in Table 5, and the text on p. 20, lines 5-17, describing the visually observed particle sizes of the removed wax. Thus, in this overall context, dispersal of the coating is meant to be removal of the coating from the treated material and its subsequent distribution within the aqueous medium in which the treated materials are immersed.


15 Therefore, in view of the definitions of "dispersible" provided in the specification, and the definitions of the terms repulping and recycling, Applicant submits that one of ordinary skill in the art would be reasonably apprised of the scope of the invention, and understand that removal of the applied coating in warm alkaline water also refers to recycling of the material.

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4. **CONCLUSION**

Applicant respectfully submits that Claims 30-39, 41, 42, 45, and 47 define patentable subject matter, and for the reasons presented above, the Board must reverse the rejections of these Claims, determine that these Claims define patentable subject matter, and allow the present pending Claims.

Respectfully submitted,

  
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Dated: November 19, 2007

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